6BR8

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MEDIUM-MU TRIODE— SHARP-CUTOFF PENTODE

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:
- Voltage . . . . 6.3 . . . . ac or dc volts
- Current . . . . 0.45 . . . . amp

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield°	
Triode Unit:			
Grid to plate	1.8	1.8	μμf
Grid to cathode and heater.	2.5	2.5	μμf
Plate to cathode and heater.	0.4	1	μμf
Pentode Unit:			
Grid No.1 to plate	0.015 max.	0.008 max.	μμf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	5	5	μμf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	2.6	3.5	μμf
Heater to cathode (Each unit).	3	3•	μμf

Characteristics:

	Triode Unit	Pentode Unit	
Plate-Supply Voltage	150	250	volts
Grid-No.2 (Screen-Grid) Supply Voltage	–	110	volts
Cathode Resistor	56	68	ohms
Amplification Factor	40	–	
Plate Resistance (Approx.) . .	5000	400000	ohms
Transconductance	8500	5200	μmhos
Plate Current	18	10	ma
Grid-No.2 Current	–	3.5	ma
Grid-No.1 Voltage (Approx.) for plate current of 10 μa .	–12	–10	volts

Mechanical:

Operating Position . . . . Any
Maximum Overall Length . . . . 2-3/16"
Maximum Seated Length . . . . 1-15/16"
Length, Base Seat to Bulb Top (Excluding tip). 1-9/16" ± 3/32"
Maximum Diameter . . . . 7/8"
Dimensional Outline . . . . *See General Section*
Bulb T6-1/2

°,•: See next page.

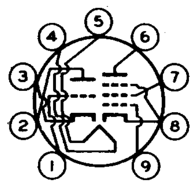
ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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Base. . . . . .Small-Button Noval 9-Pin (JETEC No.E9-1)
Basing Designation for BOTTOM VIEW. 9FA

Pin 1 - Triode Grid
Pin 2 - Triode Plate
Pin 3 - Triode Cathode
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - Pentode Plate
Pin 7 - Pentode Grid No.2



Pin 8 - Pentode Cathode, Pentode Grid No.3, Internal Shield
Pin 9 - Pentode Grid No.1

CONVERTER SERVICE

Maximum Ratings, *Design-Center Values:*

	Triode Unit as Osc.	*Pentode Unit as Mixer*	
PLATE VOLTAGE	300 max.	300 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	–	300 max.	volts
GRID-No.2 VOLTAGE	–	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive bias value	0 max.	0 max.	volts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 150 volts	–	0.5 max.	watt
For grid-No.2 voltages between 150 and 300 volts	–	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	
PLATE DISSIPATION	2.7 max.	2.8 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. . . .	200 max.	200 max.	volts
Heater positive with respect to cathode. . . .	200▲ max.	200▲ max.	volts

○ With external shield JETEC No.315 connected to cathode of unit under test except as noted.

● With external shield JETEC No.315 connected to ground.

▲ The dc component must not exceed 100 volts.

Curves shown under Type 6U8-A also apply to the 6BR8